## **ABSTRACT**

A novel oxidation product derived from a carbohydrate containing 1,2-dihydroxyethylene groups in its repeating units, can be obtained by at least partially oxidizing the 1,2-dihydroxyethylene groups of the carbohydrate to dialdehyde groups, and oxidizing a part of the aldehyde groups to carboxylic acid groups. The oxidation product has a regular structure with alternating aldehyde groups and carboxyl groups in a ratio of about 1:1. It can be further transformed to an amino-substituted oxidation product by reductive amination of at least a part of the remaining aldehyde groups.